

PLIS, A

1-FW

1-A Generalisation of the Cauchy problem for a system of partial differential equations. Bull. Acad. Polon. Sci. Cl. III 4 (1956), 741-744.

The system of partial differential equations considered is of the form

$$x^i_{x^j} = f^i(x, Y, u^1, \dots, u^m, u^1_{x^j}, \dots, u^m_{x^j}) \quad (i=1, \dots, m),$$

where $Y = (y_1, \dots, y_n)$. The generalization of Cauchy's problem treated is that of finding a solution $u^i(x, Y)$ of the system for which

$$u^i(a_0, Y) = \omega^i(Y) \quad (i=1, \dots, m),$$

where the a_i denote constants and the ω^i are prescribed functions. If the f^i are Lipschitz-continuous in their last $m+n$ arguments, and if the $|a_i|$ are sufficiently small, it is proved that any solution having a complete differential is unique. If the f^i are Lipschitz-continuous in all but their first argument, if the ω^i too are Lipschitz-continuous, and if the $|a_i|$ again are sufficiently small, it is proved that a C^1 solution exists.

A. Douglis.

PLIS, A. (Krakow); TUROWICZ, A. (Tyniec)

On chords of convex bodies. Col math 12 no.1:87-89 '64

1. Mathematical Institute, Polish Academy of Sciences.

PLIS, A.

Homogeneous partial differential equations possessing solutions with arbitrarily small supports. Bul. Ac. Pol. mat. 12 no. 4:205-206 '64.

1. Institute of Mathematics, Polish Institute of Sciences, Krakow Branch. Presented by T. Wazewski.

P113 A

Fig. A. On the estimation of the existence domain for solutions of a non-linear partial differential equation of the first order. Bull. Acad. Polon. Sci. Cl. III 4 (1956), 125-129.

The initial value problem for a non-linear partial differential equation of first order

$$\frac{\partial z}{\partial x} = f(x, y_1, \dots, y_n, z, \frac{\partial z}{\partial y_1}, \dots, \frac{\partial z}{\partial y_n})$$

can be solved, according to Cauchy, on any (one-sided) neighborhood of the initial manifold M which is simply covered by the characteristic curves (*) $y_i = y_i(x, V)$ issuing from the points $V = (v_1, \dots, v_n)$ of M . The author's aim is to estimate the possible size of such a neighborhood, on which relations (*) can be inverted. For this purpose, he considers an augmented system of characteristic equations which include, besides the usual ones concerning presumptive values of x and $\partial z / \partial y_i$ on the characteristic curves, the analogous equations relating to the second derivatives $\partial^2 z / \partial y_i \partial y_j$, and he justifies the

following criterion: Where this augmented system of characteristic equations has a solution satisfying certain suitable initial conditions, the functional determinant

1/2

PLIS, A., WALEWSKI, T.

$\{ \phi_y / \phi_x \}$ will not be zero. This criterion is somewhat simplified in the case in which f is independent of x .

A. Douglis (New York, N.Y.).

Walewski, T. Sur la méthode de A. Plis de déterminer le domaine d'existence de la solution du problème de Cauchy pour les équations aux dérivées partielles du premier ordre. Bull. Acad. Polon. Sci. Cl. III, 4 (1956), 131-135.

In this paper, the results of the paper reviewed above are clearly formulated and elegantly proved.

A. Douglis (New York, N.Y.).

2/2

PLIS, A.

Bulletin - Vol. 2, no. 9, 1954.

Characteristics of nonlinear partial differential equations. In English. p. 419.

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 9, Sept. 1955
Uncl.

PLIS, A.

Plis, A. Haantjes and Alt curvatures in abstract metric spaces. *Ann. Polon. Math.* 1, 29-33 (1954).

The paper exhibits a metric transform of the segment $[0, 1]$ that is a metric arc with Haantjes curvature 0 at every point, and that does not have Alt curvature at any point. [For definitions of the terms see Chapter III of the reviewer's "Theory and application of distance geometry", Oxford, 1953; these Rev. 14, 1009]. *L. M. Blumenthal.*

PLIS, A.

PLIS, A. A uniqueness theorem for the solution of a family
~~of~~ hyperbolic integro-differential equations, Ann. Polon.
Math. 1, 135-137 (1954).

The uniqueness theorem for a problem of Wazewski [Bull.
Acad. Polon. Sci. Cl. III. 1, 79-82 (1953); these Rev. 15,
321] is reduced to that for the equation $u_{tt} - u_{xx} = 0$.

F. A. Ficken (Knoxville, Tenn.).

Integral equations

GOLAB, S.; PLIS, A. (Cracow)

A remark on the curvature of non-plane curves. Colloquium mathem 9 no. 1:127-130 '62.

1. Mathematical Institute, Polish Academy of Sciences, Warsaw

PLISS, G. S.
USSR/Who's Who - Scientific

7500.

Aug 1947

"Problem of Consumption of Metal and Reducing the Electric Energy Losses
in the USSR Electrical Industries" 2½ pp

"Elektrichestvo" No 8

Lists the works of several scientists and engineers on title subject.
Among those mentioned are A. I. Kolpakova of the Electro-Heat Planning,
Engineers V. A. Vasil'ev and E. D. Kravchik, who are employed by a
factory named Kalinin under the Ministry of Electrical Industry of the
USSR, G. S. Pliss, Member of the All-Union Committee of Standards of
the Soviet of Ministers of the USSR, and Engineer V. V. Mikhaylov of the
Technical Administration of the Ministry of the Electrical Industry of
the USSR. Short descriptions of the individual articles written by the
above-mentioned people.

LC

10098

PLISS, G. S.

PA 14T22

USSR/Motors, Electric

Jun 1947

"Raising Qualitative Standards for Electric
Machines," G. S. Pliss, 5 pp

"Elektrichestvo" Vol LXVII, No 6

Discussion of a contemplated demand for improve-
ment in the power factor, starting characteristic,
and reliability of machines in use.

14T22

PLIS, G.S., ed.

Electrical equipment for power plants) Moskva, Gos. energ. izd-vo, 1948. 344p.
(52-34573)

TK 145. 25

PLIS, G. S.

Stationary electric power equipment, standardization of basic technical characteristics.
Moskva. Standartgiz, 1948. 123 p. (49-53771)

TK425.P6

PLISS, G. S.

Technology

Electrical equipment for power plants; Moskva, Gos. energ. izd-vo, 1948.

9. Monthly List of Russian Accessions, Library of Congress, May 1953.2Unclassified.

PLISS, G. S.

PA 22/49T19

USSR/Electricity
Transformers
Testing and Standardization

Oct 48

"Standardization in Transformer Construction,"
G. S. Pliss, Cand Tech Sci, Adm on Standardization
(Gostekhniki) USSR, 5 pp

"Elektrichestvo" No 10

Reviews present state of transformer standardiza-
tion in USSR. Progress has been made but more is
needed.

22/49T19

PLISS, G.S.

Cand. Technical Sci.

Mbr., Adm. on Standardization, -cl948-.

"Raising Qualitative Standards for Electric Machines," Elektrichestvo, 67, Nov. 6, 1947;

"Crane and Metallurgical Electrical Motors," ibid., No. 1, 1948:

"Standardization in Transformer Construction," ibid., No. 10, 1948;

"Dimensions of the Butts of Axles & the Pitch of Pivotal Axes of Electrical Machines,"

Vest. Mashinostroy., No. 1, 1948;

"New Standards in Crane and Metallurgical Electric Motors" ibid., No. 3, 1948;

"New Standards for Electrical Equipment for Automobiles, Tractors, and Motorcycles,"

ibid., No. 6, 1948;

"Standardization of Autotractor Electrical Equipment," No. 6, 1949

PLISS, G. S.

May 49

USSR/Electricity Electrical Standards Voltage

"Comments on A. A. Glazunov and S. A. Gelikonskiy's Article, 'Improved Scale of Standard Voltages in the 10-220 Kilovolt Range,'" Prof S. A. Burguchev, M. M. Lebedev, Engr, I. S. Bessmertnyy, Engr, Ya. M. Bol'sham, Engr, G. S. Pliss, Cand Tech Sci, 3 pp

"Elektrichestvo" No 5

Burguchev believes authors are not free from usual errors prevalent in analysis of intermediate (1-35 kv) systems (primarily for rural areas), i.e., lack of concrete examples or comparisons. But article is very valuable theoretically. Considers further investigations necessary before changes can be justified. Lebedev has no objections to author's conclusions on 154 kv, but sees no factual basis in article for excluding other possibilities. Considers article valuable as first stage in program for organizations concerned. Agrees that 20-kv standard is desirable for rural electrification. Bessmertnyy states that article does not take into account developmental aspects of existing 6-kv municipal networks; therefore, 20-kv standard requires further analysis. Pliss notes that authors' chief variation from 1941 approved standards is 154 kv. Recommends that "Elektrichestvo" publish full project on standards developed by Min of Elec Power Plants, and then draw conclusions (continued in "Elektrichestvo," No 6, 1949).

PA 55/49T34

PLISS, G.S.

"Comments on A.A. Glazunov's and S.A. Gelkonski's

Article 'Improved Scale of Standard Voltages in the

10-220 Kilovolts Range", Elektrichestvo, No 5, 1949,

Cond Tech Sci. -c1949-.

PLISS, G. S.

20049 PLISS, G. S. Standartnizatsiya avtotraktornogo elektrooborudovaniya.
Elektrichestvo, 1949, No. 6, s. 64-67.

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.

PLISS, G. S. and KOMENKO, P. M.

Electrotechnical Materials (Elektrotekhnicheskiye Materialy), Handbook of All-Union Standards, Gosenergoizdat, 1950, 565 pp.

1. PLIS, G. S.
2. USSR (600)
7. Standards for Electrical Welding Equipment. Herald of Machine Construction, Nov 1952
9. Compilation of Information on the USSR Machine and Machine Tools Industry
Contained in Soviet Publications. ATIC. Restricted.

FA 242T31

PLIS, G. S.

USSR/Electricity - Electrical Machines
Standards

Dec 52

"New Standards for Electrical Machines," Cand Tech
Sci, G. S. Plis, Moscow

"Elektrichestvo" No 12, pp 74-79

Describes and discusses briefly new All-Union
Standards (GOSTs) for two-pole turbogenerators, hy-
droelec generators, induction motors with powers from
0.6 to 100 kw, transformers for arc welding, dc gen-
erators for arc welding, and elec resistance welding
machines.

242T31

PLIS, G.S., kandidat tekhnicheskikh nauk.

Basic trends in production standardization of the Ministry of Electrical
Industry. Vest.mash. 33 no.4:76-80 Ap '53. (MLRA 6:5)
(Machinery--Standards)

PLIS, G.S., kandidat tekhnicheskikh nauk.

It is necessary to broaden the assortment, and to improve the quality of electrical equipment and machines for everyday use. Standartizatsiya no. 2:18-24 Mr-Ap '54. (MLRA 7:6)

1. Upravleniye po standartizatsii. (Electric apparatus and appliances-- Standards)

PLIS, G. S.

PLIS, G.S., kandidat tekhnicheskikh nauk.

Quality improvement in the production of electric machinery and apparatus.
Standartizatsiia no.3:67-70 My-Je '54. (MLRA 7:6)

1. Upravleniye po standartizatsii. (Electric machinery--Standards)

PLIS, G.S.. kandidat tekhnicheskikh nauk.

Series of nominal alternating current frequencies. Elektrichestvo
no.4:64-66 Ap '54. (MLRA 7:5)

(Electric currents, Alternating)

Plis, G. S.

AID P - 1217

Subject : USSR/Electricity
Card 1/1 Pub. 27 - 12/34
Author : Plis, G. S., Kand. of Tech. Sci., Moscow
Title : New voltage standards for electric traction (standards and norms)
Periodical : Elektrichestvo, 12, 62-64, D 1954
Abstract : The rapid development of electric traction in the USSR, in particular of long distance heavily loaded freight lines and of suburban traffic, created a need to revise the old standards of the "voltage scale". The author presents the new scale and discusses its details.
Institution : None
Submitted : J1 5, 1954

PLIS, G.S., kandidat tekhnicheskikh nauk

Improving the quality of electric lighting lamps. Standart-
izatsiia no.1:45-49 Ja-F '55. (MIRA 8:6)
(Electric lamps--Standards)

PLIS, G.S.

PLIS, G.S., kandidat tekhnicheskikh nauk

Planned standards in the State All-Union Standards on electric equipment. Standartizatsiia no.4:21-25 J1-Ag'55. (MIRA 8:10)

1. Komitet standartov, mer i izmeritel'nykh priborov pri Sovete Ministrov SSSR

(Electric machinery--Standards)

Plis, G. S.

AID P - 2824

Subject : USSR/Electricity
Card 1/1 Pub. 27 - 13/30
Author : Plis, G. S., Kand. of Tech. Sci.
Title : ~~Concerning the new State standard for synchronous~~
condensors
Periodical : Elektrichestvo, 6, 67-69, Je 1955
Abstract : The new standard GOST 609-54 was approved in October,
1954 to replace the old standard of 1941. The author
enumerates the most important improvements and addi-
tions. Four tables.
Institution : None
Submitted : N 13, 1954

PLIS, G. S.

AID P - 3535

Subject : USSR/Power Eng

Card 1/1 Pub. 26 - 29/30

Author : Plis, G. S., Kand. Tech. Sci.

Title : Standardization of the electric equipment used for improving the power coefficient

Periodical : Elek. sta., ^{v. 26} 9, 61-62, S 1955

Abstract : The author suggests the standardization of different types of electric equipment used for improving the power coefficient. These include: Synchronous condensers, power capacitors and synchronous motors. The author discusses existing standards in these fields and points out to necessary additions and improvements.

Institution : None

Submitted : No date

SOV/112-57-5-10153

~~SECRET~~ (3)

Translation from: Referativnyy zhurnal. Elektrotehnika, 1957, Nr 5, p 81 (USSR)

AUTHOR: Plis, G. S.

TITLE: The State of, and Prospects for, Standardizing Industrial-Plant Electric-Supply Components (Sostoyaniye i perspektivy standartizatsii elementov elektrosnabzheniya promyshlennykh predpriyatiy)

PERIODICAL: V sb.: Tr. nauch.-tekhn. soveshchaniya po elektrosnab. prom. predpriyatiy. M.-L., Gosenergoizdat, 1956, pp 155-180

ABSTRACT: Various types of electrical equipment are at present covered by over 400 standards, of which over 200 cover equipment produced by the Ministry of Electrical Industry, about 95 are connected with equipment of radio industry and telephone communications, and the rest cover electrical equipment produced by other ministries and agencies.

B.N.A.-K.

Card 1/1

PLIS, G.S., kandidat tekhnicheskikh nauk.

Principles of drawing up standards for widely used electric machines.
Standartizatsiia no.3:18-22 My-Je '56. (MLRA 9:9)

1. Komitet standartov, mer i izmeritel'nykh priborov.
(Electric machines--Standards)

PLIS, G.S., kandidat tekhnicheskikh nauk (Moskva)

Testing electric motors and transformers. Elektrichestvo no.4:
82-83 Ap '56. (MIRA 9:7)
(Electric motors--Testing) (Electric transformers--Testing)

PLIS, G.S.

Session of the International Electric Engineering Committee. Standarti-
zatsia. no.5:88-90 S-O '56. (MIRA 10:1)
(Munich--Standardisation--Congresses)
(Electric machinery--Standards)

PLIS, G.S., kandidat tekhnicheskikh nauk.

Low-power three-phase asynchronous electric motors. Standartizatsiia
no.6:36-38 M-D '56. (MLRA 10:1)

1. Komitet standartov, ser 1 izmeritel'nykh priborov.
(Electric motors, Induction--Standards)

PLIS, G.S., kandidat tekhnicheskikh nauk, (Moskva)

New specifications for electric machines. Elektrichestvo no.11:
82-85 N '56. (MLRA 9:12)

(Electric machinery--Standards)

PLIS, G.S.; Kandidat tekhnicheskikh nauk,

Standards for methods of testing electric equipment. Elek.sta.
27 no.5:62-63 My '56. (MLRA 9:8)

(Electric apparatus and appliances--Testing)

PLIS, G.S., kandidat tekhnicheskikh nauk.

Applying preferred number series in electric machinery engineering.
Standartizatsia no.2:23-27 Mr-Apr '57. (MIRA 10:6)

1. Komitet standartov, ser i ismeritel'nykh priborov.
(Simplification in industry) (Electric machinery--Standards)

P/15, G.S.

AUTHOR: Plis, G.S., Candidate of Technical Sciences 28-3-13/33

TITLE: Standardization of Electric Machines in USSR (Standartizatsiya elektricheskikh mashin v SSSR)

PERIODICAL: Standartizatsiya, 1957, No. 3, May-June, pp 48-54 (USSR)

ABSTRACT: The article is written in connection with the session of the International Electrotechnical Commission taking place in July 1957 in Moscow. It gives a detailed review of the present state of standardization of Soviet electrical machines, mentioning all existing standards as well as those under development and planned for 1967-58 (chart on p 50). The basic standard is GOCT 183-55 (replacing the GOCT 183-41) - "Machines, electric. General technical conditions". The amendments are given. GOCT 8032-56, in force since 1956, - "Preference numbers and preference number series" - establishes the series of numbers serving as the basis for selection of values and parameter gradations. Mentioned as particularly important for electric power plants are the following amended or new standards: for turbogenerators (GOCT 533-51), for hydrogenerators (GOCT 5616-50) and for synchronous compensators (GOCT 609-54). Details of these three standards are given. GOCT 8323-57 sets the basic parameters for hydro-

Card 1/2

Plis, G.S.

AUTHOR: Plis, G.S., Candidate of Technical Sciences

28-5-4/30

TITLE: Electrification of the Country and Standardization of Electric Equipment (Elektrifikatsiya strany i standartizatsiya elektro-oborudovaniya)

PERIODICAL: Standartizatsiya, 1957, # 5, p 19-24 (USSR)

ABSTRACT: The article gives a review of the electrification of the USSR beginning with the GOELRO electrification plan. The directives of the 20th Party Congress contemplate further development for 1959-1965. During the sixth Five-Year Plan complex problems in the field of new electrical equipment types (generators, transformers, commutation equipment) must be solved. The importance of standards becomes very great.

All basic equipment for power plants and transmission lines must be produced in accordance with the standards, for example "ГОСТ 5616-50" for hydraulic generators, "ГОСТ 609-54" for synchronous compensators, "ГОСТ 538-51" for turbine-generators up to 100,000 kva. The generators of the Kuybyshev and Stalin-grad GES are manufactured according to "ГОСТ 5616-50" with additional specifications.

Card 1/4

Technicians of the Leningrad plant "Elektrosila" imeni Kirov have done great standardization work on large turbines, gene-

28-5-4/30

Electrification of the Country and Standardization of Electric Equipment

rators and synchronous compensators. There are now 12 standards for power transformers, including special types, which cover 70 % of the nomenclature. The transformers require further improvement, mainly over-all dimensions and weight must be reduced and the efficiency must be raised. Cold-rolled steel and improved insulation materials will be used in future transformer designs, and the present standards will have to be revised.

Elements of high-voltage transmission lines as copper, aluminum and steel-aluminum wires, insulators and fittings, are also standardized. There are 60 cable standards for about 80-85 % of cable production (measured in costs). New standards are contemplated for new wires insulated by glass fiber and siliceous compounds. The electrification coefficient (i.e. the percentage of electric motors in the joint power of motors of all kinds), the most important indicator of the technical level of industry, is approaching 100 % in machinebuilding, metallurgy chemistry, coal, and most other branches of industry. The automatic multi-motor electric drive is becoming common in many machines, and electronics are being widely used. There

Card 2/4

28-5-4/30

Electrification of the Country and Standardization of Electric Equipment

are 13 state standards for electric motors, with unified components and parts. The yearly production of standard motors exceeds 1.5 million units. In future, new GOCTs for general use d.c. motors, multi-velocity asynchronous motors and for automation devices (selsyns and tachogenerators) must be developed.

6,500 km of new railroads will be constructed in the course of the 6th Five-Year Plan. GOCT 6962-54" has standardized the voltage for main railroads at the single figure of 3,000 volt. The former voltage of 1,500 volt, used for mail-car roads, is left for roads in use before 1. Jan 1955. There are in general four standard voltages for electric transport: 3,000, 1,500, 550 and 250 volt. The aforementioned "GOCT" assures unification of electric locomotives, motor-cars and of electric equipment for rolling stock and substations. It should be amended by addition of minimum permissible voltage on rolling stock current collectors. Standardization of a definite nominal a.c. voltage on such current collectors is also necessary, since the further increase in traffic will require higher voltages in the contact circuits, which can be attained best by using single-phase

Card 3/4

28-5-4/30

Electrification of the Country and Standardization of Electric Equipment

current of normal frequency. The first electric locomotives for trial exploitation and the first 80 km railroad of this system were already built. It is planned to set up and approve in 1958 a standard for d.c. electric equipment for rolling stock.

Electrification of kolkhozes, sovkhoses and MTS is of great importance. In 1955, the consumption of electric power in agriculture was 3.5 billion kwh, 2.6 billion of which were produced by village power plants. Many kolkhozes and sovkhoses have electrified such work processes as thrashing, cleaning, sorting and drying of grain, pumping of water, preparation and transportation of fodder, milking, shearing, and cleaning animals.

There are over 20 odd standards for electrical household appliances. Standards for television receivers (for television transmitters there exists the "ГОСТ 7845-55"), radio receivers, and for household refrigerators are contemplated to improve their stability and reduce the production cost.

ASSOCIATION: Committee of Standards, Measures and Measuring Devices (Komitet standartov, mer i izmeritel'nykh priborov)

AVAILABLE: Library of Congress
Card 4/4

AUTHOR PLIS, G.S. 105-5-7/26
 TITLE On the Standardization of Electric Equipment in the USSR.
 (O standartizatsii elektrooborudovaniya v SSSR.-
 Russian.)
 PERIODICAL Elektrichestvo 1957, Nr 6, pp 24 - 30 (U.S.S.R.)
 ABSTRACT At present there exist more than 400 standard specifica-
 tions in the USSR for the various kinds of electric
 equipment including radio communication and wire connec-
 tions. A short survey of the most important of these is
 given:
 1) Among the general standard specifications in electric
 engineering there are GOSR 721-41 "nominal voltages of
 receivers of electric energy, generators, and transformers".
 GOSR 6697-53 "Alternating current systems, the series of
 normal frequencies up to 10 000 c", GOST 6962-54
 "Electrified transports (with and without rails) with
 direct current and fed by the contact network. Series of
 voltages". Already in 1957 GOST 721-41 will be replaced by
 a new standard specification.
 2) Among the standard specifications for electric machines
 there are: GOST 183-55 "Electric Machines. General Technical
 requirements", which entered into force on 1.1.56 and

CARD 1/3

105-6-7/26

On the Standardization of Electric Equipment in the USSR.

which replaced GOST 183-41. In addition to GOST 183-55 special standard specifications were established for concrete types of machines.

3) The standard specifications for power transformers comprise: GOST 401-41 for oil transformers, which are to be checked in 1958, GOST 7207-54 for three phase transformers of arc steel furnaces, which entered into force in 1954, GOST 3484-55 "Power transformers, Test methods", which entered into force on 1.7.55 in replacement of GOST 3484-46. 4) Among the standard specifications for electric apparatus there are: GOST 2221-43 for alternating current valves, GOST 3256-46 for controllers, GOST 2491-44 for magnetic starters, which are all more than 10 years old and need checking. Finally, there is GOST 6827-54 for the series of nominal currents for high- and low voltage apparatus, which entered into force in 1954.

5) Standard specifications for electric cables, lines, and electric insulation: GOST 6515-55 for cables in aluminium covers, GOST 6526-55 for control cables, GOST 1956-52 for current carrying wire leads, GOST 7006-54 for protective coverings.

CARD. 2/3

AUTHOR: Plis, G.S., Candidate of Technical Sciences. 104-2-12/38

TITLE: Improve the quality of electric power delivered to consumers. (Uluchit kachestvo elektroenergii, postavlyaemoy potrebitelyam)

PERIODICAL: "Elektricheskie Stantsii" (Power Stations), 1957, Vol.28, No.2, pp. 51 - 52 (U.S.S.R.)

ABSTRACT: The quality of power supply means stability of voltage and frequency and symmetry of phase voltages. The existing technical rules require that the frequency should be maintained at 50 c/s \pm 0.2 c/s or 0.5 c/s according to whether recording frequency meters are used or not, whilst the voltage should be maintained within \pm 5%. In fact voltage variations are very much greater than this, often being more than - 10%, cases of \pm 10% and - 17% being mentioned. This causes damage to motor windings, interferes with the work of plating shops, heat treatment shops and electric furnaces. Paper making machinery fails to work properly. Broadcasting and communications are interfered with. Electric railway transport cannot work to schedule. Phase voltage asymmetry is not so common but does occur. High voltages cause damage to lamps and power factor correction capacitors.

Card 1/2

It will be a very expensive and time consuming matter to

Improve the quality of electric power delivered to consumers.
(Cont.)

104-2-12/38 .

put all this right. Approximate calculations on the Moscow power system show that 60 - 65 million Roubles expenditure will be required to keep voltage variations within $\pm 5\%$. However, realistic state standards should be introduced for quality of power supply and matters should be put right by the end of the sixth Five Year Plan.

AVAILABLE:

Card 2/2

PLIS, G.S.

28-58-3-23/39

AUTHORS: Rokhlin, G.N., Candidate of Technical Sciences; Popov, F.S. Engineer; Skobelev, V.M., Candidate of Technical Sciences; ~~File~~ G. S.

TITLE: On the Problem of Improving the Economy of Electric Light Bulbs (O povyshenii ekonomichnosti osvetitel'nykh elektriclamp) Comments on the Article by Ya.S. Zapolyanskiy (Otkliki na stat'yu Ya.S. Zapolyanskogo)

PERIODICAL: Standartizatsiya, 1958, Nr 3, pp 67 - 69 (USSR)

ABSTRACT: These are three separate letters containing critical remarks on the article "Ways of Improving the Economy of Light Bulbs" by Ya.S. Zapolyanskiy, published in "Standartizatsiya", 1958, Nr 2. Some of the recommendations made by Zapolyanskiy are questioned and refuted. Following the letters, the Chief of the Department for Electrical Engineering and Communication of the Committee of Standards, Measures and Measuring Devices G.S. Plis informs that the "GOST 2239-54" standard for light bulbs will be subject to revision in 1958-1958. The suggestions presented by all four authors (Zapolyanskiy, Rokhlin, Popov and Skobelev) will be considered. The preparation of the new "GOST" standard has not yet begun. G.S. Plis says that Gosudarstvennyy Komitet po radioelektronike (State Committee for Radio-Electronics) must organize this work and distribute it among separate organiza-

Card 1/2

28-58-3-23/39

On the Problem of Improving the Economy of Electric Light Bulbs. Comments
on the Article by Ya.S. Zapolyanskiy

tions. There is 1 table, and 1 graph.

ASSOCIATIONS: Vsesoyuznyy nauchno-issledovatel'skiy svetotekhnicheskiy
institut (All-Union Scientific Research Institute of Lighting
Engineering); Otdel elektrotekhniki i svyazi Komiteta standartov,
mer i izmeritel'nykh priborov (Department for Electrical Engi-
neering and Communication of the Committee of Standards, Measu-
res and Measuring Devices)

Card 2/2

1. Incandescent lamps--Standards

FLIS, Grigoriy Samuilovich; MOYZHES, S.M., red.; LARIONOV, G.Ye., tekhn.red.

[Handbook of standard electric equipment; electric machinery and
transformers] Spravochnik po standartnomu elektrooborudovaniyu;
elektricheskie mashiny i transformatory. Moskva, Gos.energ.izd-vo.
1959. 464 p. (MIRA 12:12)
(Electric machinery) (Electric transformers)

PLIS, G.S.

Electrification in the U.S.S.R. and the standardization of electric equipment (on the occasion of the fortieth anniversary of Lenin's national plan for the electrification of Russia). Standartizatsia
24 no.12:3-6 D '60. (MIRA 13:11)
(Electrification) (Electric standards)

PLIS, G.S.

Landmarks. Standartizatsiia 29 no.9:9-11 S '65. (MIRA 18:12)

1. Nachal'nik otдела Gosudarstvennogo komiteta standartov,
mer i izmeritel'nykh priborov SSSR.

PLIS, Grigoriy Samuilovich; ANTIK, I.V., nauchn. red.

[Standardization of electrical equipment] Standartizatsiya elektrotekhnicheskogo oborudovaniya. Moskva, Izd-vo standartov, 1964. 302 p. (MIRA 17:9)

PLIS, G.S., kand.tekhn.nauk

Now standard on voltage ratings. Elektrichestvo no.6:76-82 Je '62.
(MIRA 15:6)

1. Komitet standartov, mer i izmeritel'nykh priborov pri
Sovete Ministrov SSSR.

(Electric standards)

PLIS, G.S.

Standards for rated voltages and frequencies, and the electrification of the country. Standartizatsia 26 no.6:7-12 Je '62.
(MIRA 15:7)

(Electric standards)

PLIS, G.S.

Working committee No.11 "Electric Engineering." Standartizatsiia
25 no.11:54-55 N '61. (MIRA 14:11)
(Electric standards)

PLIS, G.S.

Standardization of electric motors and generators. Standartizatsiia
25 no.8:20-26 Ag '61. (MIRA 14:7)
(Electric motors--Standards)
(Electric generators--Standards)

PLIS, G.S.

Violation of state standards for conventional symbols. Standartizatsiia 25
no.3:43 Mr '61. (MIRA 14:3)

(Signs and symbols—Standards)

DU SYUYE-ZHEN' [Tu Hsieh-jen]; PLIS, Yu.A.; SOROKO, V.M.; SOROKO, L.M.

Apparatus for generating intense molecular beams by means of
a supersonic nozzle. Prib. i tekhn. eksp. 9 no.6:104-106 M-D
'64. (MIRA 18:3)

1. Ob'yedinennyy institut yadernykh issledovaniy.

PLISAN, I.G., inzh.; VAKSMAN, S.Kh., inzh.

More efficient burning of anthracite culm at the Minsk Steam Power
Plant No.3. Teploenergetika 5 no.3:26-28 Mr '58. (MIRA 11:4)

1. Minskaya Teploelektrotsentral' - 3.
(Minsk--Boilers)

PLIS, G.S.

Role of standards in saving nonferrous metals in the cable
industry. Standartizatsia 24 no.5:6-9 My '60. (MIRA 14:3)
(Cables—Standards) (Nonferrous metals)

DU SYUA-ZHEN' [Tu, Hsueh-hen]; PLIS, Yu.A.; SOROKO, V.M., SOROKO,
L.M.

[Setup for producing intense molecular beams by means of
a supersonic nozzle] Ustanovka dlia poluchenia intensiv-
nykh molekuliarnykh puchkov s pomoshch'iu sverkhzvukovogo
sopla. Dubna, Ob"edinennyi in-t iadernykh issl. 1963. 35 p.
(MIRA 17:7)

ALEKSANDROV, S.N., inzh; KEL'MAN, L.Ya., inzh; PLISAN, I.G., inzh;
KAMENSKIY, S.K., inzh; RUVIMSKIY, I.M., inzh

Improving the feed-water tubing circuit. Elek.sta 29 no.9:58-64
S '58. (MIRA 11:11)

1. Pridneprovskaya gosudarstvennaya rayonnaya elektricheskaya
stantsiya.

(BOILERS)

PLISAN I.G.

AUTHOR: Plisan, I.G. (Engineer) & Vaksman, S.Kh. (Engineer) 90-3-7/26

TITLE: Rationalisation of the combustion of anthracite dust at the Minsk Heat and Electric Power Station No.3. (Ratsionalizatsiya szhiganiya antratsitovogo shtyba na Minskoy TETS-3)

PERIODICAL: Teploenergetika, 1958, No.3. pp.26-28 (USSR)

ABSTRACT: Boilers type TΠ-230-2 intended for burning lean coal were installed at Minsk Heat and Electric Power Station No.3. At the station the boilers were adapted to burn anthracite dust, of the three boilers two were reconstructed to have liquid ash removal and to operate at constant high loads. The third boiler had dry ash removal and was used to follow load variations. The reconstruction of the boilers to burn anthracite dust, with liquid slag removal is then described. The general arrangement of the reconstructed boiler with horizontal slag hearth and two cooled slag holes is illustrated in Fig.1. Boiler No.1. was reconstructed in this way and operated with liquid slag removal for three months. It was found that when combustion was steady the slag was not liquid enough and the slag holes clinkered up every three or four days, so that the boiler had to be stopped for deslagging. Because of this unsatisfactory experience, in adapting boiler No.3. use was made of the liquid ash removal arrangements illustrated in Fig.2, which was developed by the Taganrog Boiler Works and in which the hearth contains four ash holes, one of which is especially large, and one slag pit filled with water.

Card 1/3

96-3-7/20

Rationalisation of the combustion of anthracite dust at the Minsk Heat and Electric Power Station No.3.

The centre turbulent burners were also lowered 2 metres. With this hearth there was no accumulation of liquid slag on the hearth. The performance of Boiler No.3. was satisfactory. With a milling fineness of 7% on an 88 micron sieve the heat loss due to mechanical non-combustion is 5.2% and loss with the flue gases 6.9%. The efficiency of the boiler is 87.7%. The ash hole cooling coil was unsatisfactory and a new one was constructed as illustrated in Fig.3. When burning anthracite dust there is a strong tendency for slag to stick to the heating surfaces, particularly if combustion is good. Intense slagging of the heating surfaces was observed on boiler No.3. and this gave rise to very uneven temperature distribution in the superheater as will be seen from the graphs in Fig.5. Because of ash deposits it was necessary to shut down the boiler to prevent damage to the tubes. Attempts to remove the deposits by hand were unsuccessful, but the problem has now been partially solved by short periods of washing with water at a pressure of 10 atms whilst the boiler is operating. This does not endanger the superheater tubes. Tube slagging was not observed on boilers operating with dry ash removal. There was also intensive ash deposition on the tail heating surfaces in the gas temperature range 450 - 650°C. The output of the boiler was indeed limited because of the increased

Card 2/3

96-3-7/28

Rationalisation of the combustion of anthracite dust at the Minsk Heat and Electric Power Station No.3.

resistance of the gas ducts. Further improvements were made on Boiler No.4. which commenced operation in June, 1957. The method of delivering fuel to the furnace was improved, the embrasures were reconstructed and conical ends were used on the burners instead of cylindrical. Until now air has been used to transport dust to the furnace, a large part of the heat of the air was used to dry the fuel. After reconstruction, the air temperature will be increased to 350 - 400°C. The dusty air from the fuel preparation system is passed into the furnace through special nozzles arranged as shown in Fig.6. The new conical embrasures are illustrated in Fig.7. The performance of boiler No.4. after reconstruction is characterised by the following data. When the fineness of milling is such that there is 10.5% residue on an 88 micron sieve the heat loss due to mechanical non-combustion is 4.4%, the heat lost with the flue gas is 6.5% and the boiler efficiency is 88.5%. The use of liquid ash removal with the burners installed lower down reduces the loss due to mechanical non-combustion and reduces the temperature of the outgoing flue gas by 20 - 30°C. There are 7 figures.

ASSOCIATION: Minsk Heat & Electric Power Station, No.3. (Minskaya TETs-3)

AVAILABLE: Library of Congress.

Card 3/3

PLISAN, O.G., dotsent; LEONTYUK, A.S.

Removal of embolus form aortic bifurcation. Sov.med.20 no.10:86-88
0 '56. (MLRA 10:1)

1. Is kafedry fakul'tetskoy khirurgii Minskogo meditsinskogo
instituta (dir. - dotsent I.M.Stel'mashonok)
(AORTA, dis.
embolus of bifurcation, surg.)

PLISAN, O.G., dotsent; KOSMACHEV, V.I., assistant

Diseases of the surgically treated stomach. Zdrav.Belor. 5 no.1:
9-13 Ja '60. (MIRA 13:5)

1. Iz kafedry fakul'tetskoy khirurgii (zaveduyushchiy - professor
P.N. Maslov) Minskogo meditsinskogo instituta.
(STOMACH--DISEASES)

PLISAN, O.G., dotsent

Intra-arterial administration of drugs into the femoral arteries
under the tourniquet. Zdrav.Bel. 8 no.2:6-10 P '62.

(MIRA 15:11)

1. Kafedra fakul'tetskoy khirurgii Moskovskogo meditsinskogo
instituta (zav. kafedroy - prof. P.N.Maslov).

(INJECTIONS, INTRA-ARTERIAL)

PLISAN, O.; PILETSKIY, M.

Book reviews and bibliography. Zdrav. Bel. 8 no.6: 77 Je'62.
(MIRA 16:8)

(NO SUBJECT HEADINGS)

PLISAN, O. G., DOCENT

USSR/Medicine - Drugs Effect
Medicine - Injections, Intra-Arterial

Jan 48

"Intra-Arterial Injections of Drugs as a Medical and
Prophylactic Treatment," Docent O. G. Plisan, 7 pp

"Vest Khirurgii" Vol LXVII, No 1

Wider use of intra-arterial injection was initially
suggested by Acad. N. N. Burdenko in 1942. Given case
histories of successful application since then and
explains advantages over intravenous injection. De-
scribes injection technique. On basis of his ex-
perience with 68 cases, Plisan discusses application
of intra-arterial treatment for (1) vascular compli-
cations and inflammatory processes, (2) preparation
of patient for surgery and, as a prophylaxis in
postoperative complications, (3) treatment of pain-
ful syndromes, (4) spontaneous and senile gangrenes,
and (5) neuralgia of trifacial nerve.

778

4/49861

PLISAN, O.G., dotsent

Surgery on a single kidney. Zdrav. Belor. 6 no. 5:38-41 My '60.
(MIRA 13:10)

1. Iz kafedry fakul'tetskoy khirurgii Minskogo meditsinskogo
instituta (zaveduyushchiy - Professor P.N. Maslov).
(KIDNEYS—SURGERY)

PLISAN, O.G. dotsent; KOSMACHEV, V.I., assistant

Late results following repeated stomach surgery in peptic ulcer.
Zdrav. Bel. 7 no. 4:35-38 Ap '61. (MIRA 14:4)

1. Iz kafedry fakul'tetskoy khirurgii (zaveduyushchiy professor
P.N. Maslov) Minskogo meditsinskogo instituta na baze khirurgiche-
skogo otdeleniya 2-oy klinicheskoy bol'nitsy (glavnyy vrach
B.V. Drivotinov).

(PEPTIC ULCER)

PLISAN, I.G. inzhener.

Firing and stopping high pressure boilers. Elek.sta. 28 no.3:75-76
Mr '57. (MLRA 10:5)

(Boilers)

PLISAN, I. G.

104-3-27/45

AUTHOR: Plisan, I.G., Engineer.

TITLE: Starting-up and closing down high pressure boilers.
(Rastopka i ostanovka kotlov vysokogo davleniya)

PERIODICAL: "Elektricheskiye Stantsii" (Power Stations), 1957,
Vol.28, No.3, pp. 75 - 76 (U.S.S.R.)

ABSTRACT: When high pressure boilers are started up or shut down temperature stresses are set up in them. In order to obtain data which could form a basis for limiting the temperature differences between the upper and lower drums during starting up and closing down of a boiler a large number of observations were made on starting and closing down a boiler type TN-230. In addition to the usual readings drum temperatures and pressures were measured. The results are plotted in the form of graphs of temperature and pressure against time during the processes of starting up and shutting down. The results obtained are analysed and recommendations are made about the steps that are necessary in order to reduce the temperature differences that occur in the two cases. There are 2 figures.

AVAILABLE: Library of Congress

Card 1/1

FLISAN, O.G., dotsent

"Collection of papers based on the experience of Mogilev
Province physicians," edited by A.M. Busakovich and D.M.
Kulik. Reviewed by O.G. Flisan. Zdrav.Belor. 4 no.3:71-73
Mr '58. (MIRA 13:7)
(MEDICINE) (BUSAKOVICH, A.M.) (KULIK, D.M.)

PYTEL', A.Ya.; GOLIGORSKIY, S.D.; VASIL'YEV, V.V.; KUCHINSKIY, I.N.; NISENBAUM,
L.I.; CHEBANYUK, G.M.; BOGDANOVICH, I.A.; PLISAN, S.O.; SURIS.A.S.

Achievements of contemporary nephrology. Kidneys and ureters.
Urinary bladder. Urologiia 28 no.3:82-92 '63 (MIRA 17:2)

KANDA, M., inz.; PAVELKA, J., inz.; PLISCHKE, M., inz.

An apparatus for the measurement of power load. Energetika Cz 11 no.6:
293-294 Je '61.

PLISE, A.K.

194

THE HIGH TEMPERATURE OXIDIZATION OF PARAFFIN WAX - A K Plise and A I Bykovets
from the Organic Chemistry Laboratory of the Odessa Technological Institute
of the Food and Refrigeration Industry - The Journal of Applied
Chemistry of the USSR (Vol 24, 1951)

This paper reports on what appears to be relatively preliminary experiments on the high temperature oxidation of paraffin wax with the primary objective being the reduction in oxidation time required without a degradation in quality of the oxidate.

A great deal of the early work on the oxidation of paraffin that was conducted prior to 1920 was concerned with high temperature oxidation, that is, temperatures above about 150°C. However, it has been known for sometime that high temperature oxidations of the normal type result in acids of a degraded quality primarily from the standpoint of excess amounts of hydroxy type acids that are formed and the dark colors of the products. These hydroxy acids are undesirable in the preparation of synthetic edible fats and they are also undesirable in some other applications such as in lubrication oil additives, etc, due to their mineral oil insolubility. Consequently, most of the successful commercial oxidation of paraffin wax has been conducted somewhere in the range of 220°F to possibly 250°F. The lower temperature oxidations favor high yields of carboxylic type acids and lower amounts of the hydroxy acids. The lower temperatures also produce lighter colored products, which can be more easily refined and purified to an edible form of fat or for use in other applications. It is true that the low temperature oxidations will require longer periods of oxidation. Consequently, larger reaction vessels would be required. An advantage would be expected if the reaction could be conducted at the higher temperatures while maintaining high

274

quality of products, as the reaction time would be shorter and the thruput or capacity of a given plant would be considerably increased. This would in effect, result in a reduction in cost of the fatty material prepared by the oxidation of paraffin wax.

This particular paper covers some work on efforts to oxidize paraffin wax for very short periods of time in the order of one minute while using temperatures in the range of 200 to 500°C. The experimenters claim that the optimum temperature range is 300 to 400°C and report a relatively rapid oxidation at those temperatures showing neutralization number or acid number values in the range of 20 for the one minute of contact time. It is further claimed that the amount of hydroxy acids formed is essentially nil. The data in the table on page 1359 indicate the presence of no hydroxy acids, however, it also shows that the hydroxyl number is relatively high (140 to 150). Although the method of analysis for hydroxy acids is not shown there would be some question as to whether or not their analysis is correct if they have a high hydroxyl number yet claim the practical absence of hydroxy acids.

This type of oxidation, that is using the relatively short contact time at an increased temperature, should lend itself to some form of a continuous process.

Although not mentioned in the particular paper, most of the oxidation procedures which have been in commercial use in Germany and in other locations, have been batch processes. In general, there would be certain economic advantages if the oxidation procedure could be conducted on a continuous basis. The German literature reports a number of efforts to develop a continuous process, however, the continuous processes have usually resulted in a degradation of product quality.

374

The fact that this work was apparently done at the Odessa Technological Institute of the Food and Refrigeration Industry may indicate that the Soviet Union is concerned in this particular work with the problem of preparing edible fats from the oxidation of paraffin. This would be a continuation or further work on the type of process that was operated in Germany during World War II. The fact that considerable emphasis is placed on the absence of hydroxy acids which would be very undesirable in any type of edible fatty material, further indicates that these investigators were interested in the utilization of the oxidates for edible fats. Since the preparation of the edible fats type of oxidized material was conducted in Germany at relatively low temperatures in the order of 100°C, in order to obtain a light colored product with as few undesirable side reactions as possible and with as low a yield of hydroxy acids as possible, it appears that what the investigators here may have in mind is the operation of the process at a higher temperature with a much shorter contact time and thereby reducing the cost of the preparation of the fatty materials. The work covered by this paper is considered to be relatively preliminary in nature in that very little information on

474

the nature of the oxidates is given with regard to their physical and chemical properties. Further, it is to be expected that at the low neutralization numbers reported on in this paper, that is in the order of 2 to 20 or 30, that only a small amount of hydroxy acids would be formed in the low temperature process also. A commercial operation involving oxidation to only 20 neutralization number would not normally be attractive due to the small amount of paraffin converted to acids. However, if this oxidation were continued and, in fact, re-cycled through this apparatus, so that contact time was increased sufficiently to raise the neutralization number to a value of, for example, 80 to 100, it would be expected that the amount of hydroxy acids would increase even at low temperatures oxidations. In using the high temperatures involved here, there is a possibility that the rate at which the hydroxy acids increase with regard to neutralization number might be greater than at the lower temperatures. It is interesting to note here, however, that the Soviet Union apparently is continuing to work with some vigor on various phases of oxidation work and attempting to improve the existing oxidation procedures as well as developing various utilizations for the oxidates.

III

PLISEK, František, MUDr.

Rodent ulcer; Mccren's ulcer. Česk. ofth. 13 no.2:117-122
Apr 57.

(CORNEA, neoplasms
basal cell carcinoma (Cz))
(CARCINOMA, BASAL CELL, case reports
cornea (Cz))

PLÍŠEK, L.

4 May

Distr: 4E2c(j)

The origin and properties of a surface membrane on polyamide 6 fibers. ~~K. Schwentassck and L. Plíšek (Wool Research Inst., Brno, Czech.). Chem. průmysl 8(33), 218-18 (1958); cf. Textil 10, 293(1954); C.A. 49, 9281b.~~—When polyamide 6 fiber is placed in a series of H_2SO_4 solns. of concns. differing in steps of 0.1% between 26 and 32%, the lowest concn. at which the whole fiber just dissolves is called the crit. soln. concn. (CSC). A concn. can be found at which the core of the fiber dissolves, leaving the membrane. Thus, the membrane has a higher CSC. The values of CSC are increased by drawing out and by fixing the fibers. An identical membrane is produced whether spinning takes place in air, in N_2 , or in O_2 . The membrane probably differs from the core in having a higher orientation and degree of crystn. The membrane would probably have lower I sorption than the core, although this could not be shown owing to exptl. difficulties. However, the sorption of dyes was not affected by the presence of a membrane, which is unlike the case of viscose. Perhaps, while an increase in orientation decreases porosity, an increase in degree of crystn., which does not take place in viscose membranes, increases porosity. The I sorption of polyamide 6 fibers decreases slightly with increasing denier. Probably the core of a larger fiber cools more slowly and this promotes crystn. Thus, the difference between the membrane and the core is less in a thick fiber than in a thin one. But the core of a thick fiber, while of higher crystallinity, is of lower orientation.

CC
41

JJ

H. Newcombe

COUNTRY	:	Czechoslovakia	H-34
CATEGORY	:		
ABB. JOUR.	:	RZKhim., No. 21 1959, No.	77100
AUTHOR	:	Pajgrt, O. and Plisek, L.	
INST.	:	Not given	
TITLE	:	Imparting Permanent Pleats and Creases to Wool-Containing Fabrics	
ORIG. PUB.	:	Textil (CSR), 13, No 12, 467-469 (1958)	
ABSTRACT	:	Experiments have shown that permanent creases can be produced in pure wool and blended wool fabrics (with 30-60% viscose staple fiber) by treating the pleats before pressing with 0.5-1% of a solution of 50% thioglycolic acid, containing 0.1-0.2% of wetting agent and adjusted to a pH of 7 by the addition of CH_3COOH .	
		I. Fodiman	

CARD: 1/1

PLISEK, Vlastimil MUDr

Cerebral rheumatism. Vnitř.lék., Brno 1 no.8:578-582 Aug '55.

1. Z vnitřního oddělení nemocnice ve Vyskově, přednosta prim.
MUDr František Cernoch. Brno, Merhautova 113.

(RHEUMATIC FEVER, complications

brain dis.,diag. & ther.)

(BRAIN, diseases

compl. of rheum.fever)

DROZDOVICH, L.I.; PLISETSKAYA, A.V.

Outbreak of aseptic serous meningitis. Sov. med. 24 no. 2:129-131
F '60. (MIRA 14:2)

1. Iz detskoy bol'nitsy No. 1 (glavnyy vrach L.N. Oksmitnaya)
goroda Nikolayeva USSR.

(MENINGITIS)

LEYBSON, L.G.; PLISETSKAYA, E.M.; OGORODNIKOVA, L.G.

Effect of insulin on the isolated sartorius muscle in a saline solution deprived of calcium. Zhur. evol. biokhim. i fiziol. 1 no.4:374-375 J1-Ag '65. (MIRA 18:8)

1. laboratoriya evolyutsii endokrinnykh funktsiy Instituta evolyutsionnoy fiziologii i biokhimii imeni I.M. Sechenova AN SSSR, Leningrad.

PLISETSKAYA, E.M.

Effect of insulin and adrenaline on the blood sugar level and glycogen concentration in the liver and muscles of lamprey larvae. Zhur. evol. biokhim. i fiziol. 1 no.3:213-219 My-Je '65. (MIRA 18:7)

1. Laboratoriya evolyutsii endokrinnykh funktsiy Instituta evolyutsionnoy fiziologii i biokhimii imeni Sechenova AN SSSR, Leningrad.

LICHKO, A.Ye.; PLISETSKAYA, E.M.; LEYBSON, L.G.

Insulin activity in the blood plasma during insulin shock therapy
in psychoses. Zhur. nevr. i psikh. 65 no.2:278-282 '65.

(MIRA 18:9)

1. Laboratoriya evolyutsii endokrinnykh funktsiy (zaveduyushchiy
- doktor biolog. nauk L.G. Leybson) i laboratoriya patologii vyshey
nervnoy deyatel'nosti cheloveka (zaveduyushchiy - prof. N.N. Traugott)
Instituta evolyutsionnoy fiziologii i biokhimii im. I.M. Sechenova
(direktor - chlen-korrespondent AN SSSR Ye.M. Kreps) AN SSSR, Leningrad.

LEYBSON, L.G.; PLISETSKAYA, E.M.; OGORODNIKOVA, L.G.

Blood phosphate concentrations in chicken embryos under normal conditions and following insulin administration. Vop. med. khim. 9 no.4:373-380 J1-Ag' 3 (MIRA 17:4)

1. Institut evolyutsionnoy fiziologii imeni I.M. Sechenova AN SSSR, Leningrad.

LEYBSON, L.G.; PLISETSKAYA, E.M.; STABROVSKIY, Ye.M.

Effect of insulin on various aspects of carbohydrate metabolism
in cyclostomate and elasmobranch fishes. Fiziol. zhur. 49 no.5:
583-588 My '63. (MIRA 17:11)

1. From the Sechenov Institute of Evolutionary Physiology, Leningrad.

KREPS, Ye.M., otv. red.; VERZHBINSKAYA, N.A., red.; VINNIKOV, Ya.A., red.; VOSKRESENSKAYA, A.K., red.; ZHUKOV, Ye.K., red.; ZAGORUL'KO, T.M., red.; ITINA, N.A., red.; KARAMYAN, A.I., red.; KARMANOVA, I.G., red.; KONSTANTINOVA, M.S., red.; PLISETSKAYA, E.M., red.

[Functional evolution of the nervous system] Funktsional'naya evoliutsiya nervnoi sistemy. Moskva, Nauka, 1965. 189 p. (MIRA 19:1)

1. Akademiya nauk SSSR. Institut evolyutsionnoy fiziologii i biokhimii.

PLISETSKAYA, E. M., Cand Biol Sci -- (diss) "Certain functional properties
of smooth muscles in ^{the} phylo- and ontogenesis of cold-blooded vertebrates."
Len, 1958. 13 pp (Len Order of Lenin State Univ im A. A. Zhdanov), 100
copies (KL, 18-58, 97)

-39-

LEYBSON, L.G.; PLISETSKAYA, E.M.; OGORODNIKOVA, L.G.

Glucose-6-phosphatase of the liver of chick embryos under normal conditions and under the influence of insulin. Dokl. AN SSSR 153 no.1:240-242 N '63. (MIRA 17:1)

1. Institut evolyutsionnoy fiziologii im. I.M. Sechenova
AN SSSR. Predstavleno akademikom V.N. Chernigovskim.

LEYBSON, L.G.; PLISETSKAYA, E.M.

Technique of intravascular injection of solutions into chick embryos. Fiziol. zhur. SSSR 46 no. 9:1163-1165 S '60.

(MIRA 13:10)

1. From the Sechenov Institute of Evolutionary Physiology,
Leningrad.

(EMBRYOLOGY—BIRDS)

PLISKA, F.

"Surveyor, soil, collective farm." p. 55.

GEODETICKY A KARTOGRAFICKY OBZOR. Praha, Czechoslovakia, Vol. 5, no. 3, Mar. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 8, August, 1959.
Uncl.

Rapid methods for determining noxious substances in the air of factories. S. Pustokaya. Lab. Prakt. (U. S. S. R.) 1939, No. 12, 25-7; Khim. Referat. Zhur. 1940, No. 6, 61-2.—P. accelerated and simplified the methods for detg. Hg and SO₂ vapors. Samples of each substance are taken by drawing air through 2 consecutively placed small absorbers, each contg. 1 cc. of the absorbing soln. The Potashov method is used to det. Hg. The method is based on obtaining the red CuI.HgI₂. Pass 1-10 l. of air at the rate of 1 l. per 1-2 min. through a soln. contg. 1 2.5 and KI 30 g. per l. of water. To the soln. in the 1st absorber add 0.75 cc. of a soln. prepd. as follows: to 1 part of CuCl₂.2H₂O (7 g. per 100 cc. of water) add 4 parts of 2.5 N Na₂S₂O₄.7H₂O and after the ppt. dissolves add 1.5 parts of NaOH soln. (50 g. per l. of water). Shake the soln., let stand for 5-10 min. and compare with a standard scale of solns. contg. known amts. of Hg (0.0002 to 0.001 mg.) and treated in the same manner. To prep the standard Hg soln. dissolve 0.1354 g. of HgCl₂ in 1 l. of the absorbing soln. and dil. 100 fold a part of the soln. obtained with the same absorbing soln. One cc. of this soln. contains 0.001 mg. of Hg. SO₂ is detd. nephelometrically by oxidation to SO₃ and treatment with BaCl₂. A 5% K₂CrO₇ soln. is used as the absorbent. Pass 1-5 l. of air at the rate of 1 l. per min. through the absorbing soln. Acidify the soln. in the 1st absorber with 0.1 N HCl, add 0.5 cc. of 10% BaCl₂ soln. and compare the colors with a standard scale of solns. contg. known amts. of SO₂ (corresponding to 0.01-0.1 mg. of SO₂) and treated in the same manner. To prep. the standard soln. dissolve (0.272) g. of K₂SO₃ in 1 l. of water. One cc. of this soln. corresponds to 0.1 mgr. of SO₂.

W. R. Henn

LEYBSON, L.G.; ZHELUDKOVA, Z.P.; PLISETSKAYA, E.M.; STABROVSKIY, Ye.M.

Change in the glycogen content in the liver and in the muscles of chick embryos under the influence of insulin introduced into the blood. Fiziol. zhur. 47 no.7:900-905 J1 '61. (MIRA 15:1)

1. From the I.M.Setchenov Institute of Evolutionary Physiology,
Leningrad.

(LIVER) (MUSCLE) (INSULIN) (GLYCOGEN)